## DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

P12EA Revision 9 McCAULEY 1B235 1P235 1A230 1C235 December 7, 2004

#### TYPE CERTIFICATE DATA SHEET NO. P12EA

Propellers of models described herein conforming with this data sheet (which is part of Type Certificate No. P12EA) and other approved data on file with the Federal Aviation Administration, meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Federal Aviation Regulations provided they are installed, operated and maintained as prescribed by the approved manufacturer's manuals and other approved instructions.

Type Certificate Holder: McCauley Propeller Systems

7751 East Pawnee Wichita, KS 67207

Type Fixed pitch, single-piece

Material Aluminum alloy

Number of Blades Two

Takeoff &							Diameter			Weight	
Model	Max	Cont.		Standard	No.	Dia.	Dia. Bolt	Pilot	Hub D	imensions	(lb.)
(See NOTE 2)	HP	RPM	Diameter	Pitch	Holes	Holes	Circle	Hole	Dia.	Thickness	(Max. Dia.)
1A230/AFC	230	2600	84"-76"	80-40"	6	33/64"	4"	2-1/4"	5-1/4"	3-9/16"	35.0
1B235/BFA	260	2700	84"-74"	80-40"	6	33/64"	4-3/4"	2-1/4"	6"	7-7/16"	42.0*
1B235/DFC	260	2800	84"-72"	80-40"	6	33/64"	4"	2-1/4"	5-1/4"	3-7/16"	36.2
1B235/EFC	260	2800	84"-72"	80-40"	6	33/64"	4"	2-1/4"	5-1/4"	3-7/16"	40.5*
1C235/LFA	260	2700	84"-74"	80-40"	6	33/64"	4-3/4"	2-1/4"	6"	6-15/16"	41.7
1P235/AFA	260	2700	84"-76"	80-40"	6	33/64"	4-3/4"	2-1/4"	6"	3-7/16"	35.0
1P235/PFA	260	2700	84"-76"	80-40"	6	33/64"	4-3/4"	2-1/4"	6"	4-11/16"	38.0*

<sup>\*</sup>Weight includes integral doweled spacer.

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Certification basis

Model 1P235/PFA:

Civil Air Regulations Part 14 effective December 15, 1956.

Models 1A230/AFC and 1P235/AFA:

Civil Air Regulations Part 14 effective December 15, 1956 with

Amendment 14-1 thereto.

Model 1B235/BFA:

14 CFR Part 35 with Amendment 35-1 thereto.

Model 1B235/DFC:

14 CFR Part 35 with Amendments 35-1 and 35-2 thereto.

Model 1C235/LFA:

14 CFR Part 35 with Amendments 35-1, 35-2, 35-3, 35-4, 35-5 and

35-6 thereto.

Model 1B235/EFC:

14 CFR Part 35 with Amendments 35-1, 35-2,

35-3, 35-4, 35-5, and 35-6 thereto.

Type Certificate No. P12EA issued May 17, 1963 under Delegation Option Authorization provisions of Part 410 of the Regulations of the

Administrator.

Date of Application for Type Certificate May 2, 1963.

#### Production basis

#### Production Certificate No. 3

NOTE 1. <u>Installation</u>. These propellers are for installation on flanged propeller shaft. Install with special alloy steel bolts specified or furnished by the propeller manufacturer.

Model 1A230/AFC is for use on special flange with 4 in. B.C. and must be installed in accordance with McCauley Drawing C-3406.

Model 1B235/BFA is for use on modified SAE No. 2 flange with six 1/2" mounting bolts and McCauley P/N B-3637 spacer and must be installed in accordance with McCauley Drawing C-3639.

Model 1B235/DFC is for use on special flange with 4 in. bolt circle and must be installed in accordance with McCauley Drawing C-2359.

Model 1B235/EFC is for use on special flange with 4" bolt circle and McCauley P/N C-7744 Spacer and must be installed in accordance with McCauley Drawing C-7743.

Model 1C235/LFA is for use on modified SAE No. 2 flange with six 1/2" mounting bolts and McCauley P/N C-5464 spacer and must be installed in accordance with McCauley Drawing C-5465.

Model 1P235/AFA is for use on modified SAE No. 2 flange with six 1/2" mounting bolts and must be installed in accordance with McCauley Drawing C-3430.

Model 1P235/PFA is for use on modified SAE No. 2 flange with six 1/2" mounting bolts and McCauley P/N C-3247 spacer and must be installed in accordance with McCauley Drawing C-3245.

NOTE 2. <u>Propeller Model Designation</u>. The propeller model designation consists of a series of numbers suffixed to the basic design number to indicate propeller diameter and geometric pitch at the .75 radius.

NOTES 3,4,5,6 Not applicable.

### NOTE 7. <u>Accessories</u>.

- a. Spinners
  - (1) Model 1P235/PFA is eligible with McCauley spinner; reference D-3326 shell, C-3327 fillet, D-2807 bulkhead and D-3328 installation.
  - (2) Model 1B235/EFC is eligible with McCauley spinner; reference D-7736 spinner assembly.

NOTE 8. Not applicable

NOTE 9.

# <u>Table of Propeller-Engine Combinations Approved</u> Vibrationwise for Use on Normal Category Single Engine Tractor Aircraft

The maximum and minimum propeller diameters that can be used from a vibration standpoint are shown below. No reduction below the minimum diameter listed is permissible since this figure includes the diameter reduction allowable for repair purposes.

Propeller <u>Model</u>	Engine Model	Max. Dia. (Inches)	Min. Dia. (Inches)	Placards
1P235/AFA	Lycoming O-540 &IO-540 series, with one $5^{th}$ and one- $6^{th}$ order crankshaft damper configuration (up to 260 hp @2700 rpm)	84	77	None
1P235/PFA	Lycoming O-360 series (up to 180 hp @2700 rpm)	78	74	None
1B235/BFA	Lycoming IO-360 series (up to 200 hp @2700 rpm)	78	74	None
1B235/BFA	Continental O-470 series, with one-5 <sup>th</sup> and one-6 <sup>th</sup> order crankshaft damper configuration (up to 230 hp @2600 rpm)	84	80	None
1A230/AFC	Continental IO-360 series with two-6 <sup>th</sup> order or one-6 <sup>th</sup> and one-4.5 order crankshaft damper configuration (up to 210 hp @2800 rpm)	82	72	None
1B235/DFC	Continental IO-360 series with two-6 <sup>th</sup> order or one-6 <sup>th</sup> and one-4.5 order crankshaft damper configuration (up to 210 hp @ 2800 rpm)	76	74	None

NOTE 10. The word "eligible" as used herein does not signify approval. For approval, compliance with the applicable aircraft airworthiness requirements is necessary.

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